



BROADBAND INTERNET EXPANSION FOR PRESQUE ISLE TOWNSHIP

TOWN OF PRESQUE ISLE PUBLIC INFORMATION SESSION
AUGUST 23, 2021 AND SEPTEMBER 7, 2021

WELCOME!

- This is the first in a series of public information sessions about plans to bring improved broadband internet service to Presque Isle Township
- This effort is driven by the ad-hoc Broadband Working Group on behalf of the Town Board
- We'll present an update on where we are now and leave plenty of time for questions

WHY ARE WE TALKING ABOUT THIS?

- The Presque Isle Economic Development Committee (EDC) and Town Board believe that improved broadband internet access creates a positive impact for the entire Township
 - Allows Presque Isle to better compete for businesses and residential property buyers
 - Allows remote work options for full time residents, seasonal residents, and visitors
 - Gives visitors a reason to stay longer in the area and bring monies into the local economy
 - Provides access to tele-health services from both local and national providers
 - Provides better options for remote learning for students of all ages

OKAY, BUT WHAT'S IN IT FOR ME?

- Watch TV
- Watch videos for pleasure, education (Tele-Education), research, study, etc.
- Run any business, but especially ones that move large amounts of data – high tech or not
- Communicate – Voice and Video
- Interface with your health care provider – Tele-Health
- Bank online
- Buy anything
- Improve property values and make sales easier
- Use the Cloud for data
- Sell products and market services
- Interactive gaming
- Work remotely
- Use a smart bike or other exercise equipment in a virtual gym
- Run smart devices
 - Thermostat; Refrigerator; Security system/cameras; Open doors, turn on lights; Start vacuum, etc., etc.
- Nearly anything else you can imagine

SOME DEFINITIONS

- **Broadband**

A generic term for high-speed internet access delivered over many technologies

Copper wire (traditional phone service); Co-axial cable (cable TV); Fiber optic cable; Wireless (mobile or fixed point); Satellite (low orbit or geosynchronous)

The minimum federal standard for a service to be considered broadband is 25Mbps download and 3Mbps upload

- **ISP**

Internet Service Provider; companies that provide access to the Internet for residential and business customers

- **Living Unit**

The measurement that the FCC/ISP use to determine how many locations need improved broadband access; derived from US Census, FCC, and ISP databases

- **Fiber to the Home (FTTH)**

An acronym for infrastructure projects that bring fiber optic cable directly to a residence or business

- **RDOF (Rural Digital Opportunity Fund)**

A federal program to improve rural broadband access throughout the US

BROADBAND INTERNET SERVICE VARIES ACROSS THE TOWNSHIP

- Some living units have no internet access by any method
- CenturyLink (now LUMEN) provides 1.5Mbps to 25Mbps guaranteed download speed over existing copper wires; most common is 10Mbps download speed
 - Of the approximately 1,640 living units in the Town, about 580 have less than 10Mbps download speed
 - A few living units have higher speeds based upon distance and special services
- Some living units use satellite-based broadband (HughesNet, Viasat, Starlink)
- Some living units in the western half of the Town can use mobile broadband
- LUMEN will not improve broadband internet service over the existing copper lines in Presque Isle Township; the copper lines are considered obsolete and will be in “maintenance mode” only

THE TOWN IS COMMITTED TO PROVIDING IMPROVED BROADBAND INTERNET ACCESS TO ALL OF PRESQUE ISLE TOWNSHIP

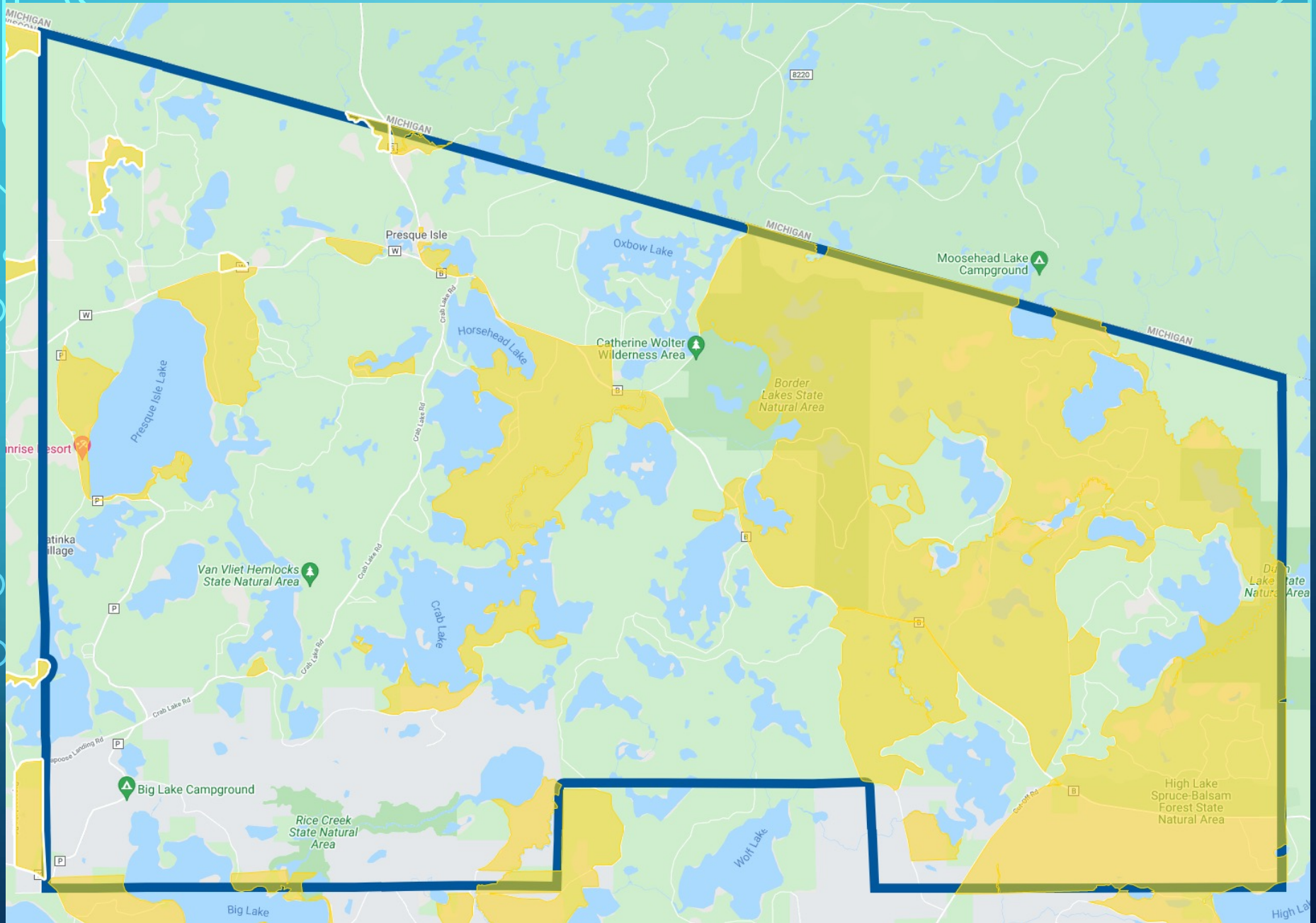
- While there are a few available options for individuals, the Town believes that all property owners need access to the same level of service throughout the Township
- Through a motion passed on July 29, 2021, the Town authorized the Broadband Working Group to work with ISP's and pursue financial grants to build a FTTH solution for the Township

WHAT IS A “FIBER TO THE HOME” PROJECT?

- Fiber optic cables would be installed throughout Presque Isle Township to allow all living units to have access to that network
- Based upon the final contract with the ISP, fiber may be brought directly to the primary dwelling as part of the project
- The property owner will have more than one service level option, up to 1 Gbs service
 - 1 Gbs service is 40x the current 25Mbs guaranteed service
- We are using the Boulder Junction broadband expansion project as a model

WHO ARE WE EVALUATING FOR THE PROJECT?

- Our current ISP is CenturyLink/LUMEN
 - LUMEN has proposed a FTTH project for the entire Township
- A future ISP will be Charter Communications (Spectrum)
 - In December 2020, Charter won an RDOF auction to provide service in parts of Presque Isle Township at no cost to the Town
 - Charter will deliver FTTH, not traditional cable service
 - Charter may consider a project to cover the remainder of the Township beyond the RDOF areas
- In October 2020, we interviewed SonicNet, an Eagle River based ISP who provides fixed point wireless solutions
 - Their solution will not work in the dense forests of Presque Isle Township



PRIMARY FINANCIAL SOURCES FOR THE PROJECT

- **Federal**

- Rural Digital Opportunity Fund (RDOF)

- **State**

- Public Service Commission (PSC) grants

- American Rescue Plan (ARP) is a federal program administered by the PSC

- **Municipal**

- Loans or bond issues

- **Service Provider**

- Funds for infrastructure design and installation

- **Local Contribution**

- Funding from local organizations or individuals

- **Other Federal and State sources are under investigation**

PRELIMINARY COST ESTIMATES...

- Costs are based upon our knowledge today; we know that there will be changes
- PSC grants may be greater than 50%; we are being conservative
- These costs are for the design and installation of the fiber infrastructure throughout the Township; monthly service charges to the end consumer are based upon individual choice

... BUT COST IS NOT THE ONLY FACTOR TO CONSIDER

- LUMEN could begin work in 2022, finish in 2025
 - Depends upon successful PSC grant in December 2021
 - ISP for the Boulder Junction expansion project
- Charter RDOF work in Wisconsin begins January 2022, must complete by 2028
 - The Town will most likely be later in their schedule, as we are the farthest away from the northern edge of their existing infrastructure
 - RDOF does not cover the entire Township; schedule for living units outside RDOF areas is unknown

ESTIMATED PROJECT COSTS: CHARTER VS LUMEN

	Charter	LUMEN
Estimated Project Cost	\$4,482,000	\$10,500,000
ISP Contribution	\$(448,200)	\$(945,000)
50% PSC Grant	\$(2,016,900)	\$(4,777,500)
Cost to the Town	\$2,016,900	\$4,777,500

IMPACT TO PROPERTY OWNERS: 20-YEAR LOAN @ 4% INTEREST

		Charter	LUMEN
Annual Cost to Property Owner	Assessed value (000s)		
	100	\$24.66	\$58.41
	200	\$49.31	\$116.81
	400	\$98.63	\$233.62
Monthly Cost to Property Owner	Assessed value (000s)		
	100	\$2.05	\$4.87
	200	\$4.11	\$9.73
	400	\$8.22	\$19.47

A 10-year loan @ 3% is also an option, but will increase the costs to property owners

CHOICES, CHOICES

- Here is the basic tradeoff
 - Go with LUMEN for a higher overall cost, but completion within about 3 years
 - Go with Charter for a lower overall cost, but completion within 6 to 8 years
 - RDOF areas are Charter's focus; other parts of the Township must be negotiated
- Both options assume multiple grant awards
- Both options have risks; we "don't know what we don't know"

ANSWERS TO SOME MAJOR QUESTIONS

- Why should my tax dollars help pay for this project?
- How much will the service cost me each month?
- Why not satellite broadband, like HughesNet or Starlink?
- Why can't I just use my phone for broadband?

WHY SHOULD MY TAX DOLLARS HELP PAY FOR THIS PROJECT?

- To compete for economic development, we must look at this as a township wide problem and solution
- In many ways, broadband is no different than paying for other local services
 - Taxpayers fund all the roads, but may not use them all
 - Taxpayers fund all the boat landings, but may not use them all
 - Taxpayers fund snowplowing, but may not be here in the winter
 - Taxpayers fund fire and EMS services, but may not ever need them
 - Taxpayers fund public education, law enforcement, courts, etc., and may not make use of them

HOW MUCH WILL THE SERVICE COST ME EACH MONTH?

- LUMEN currently offers two fiber-based service plans
 - 100Mbps speed for \$49/month
 - 1Gbs speed for \$65/month
 - Current price for copper-based service of 25Mbps is \$50/month
- Charter's pricing is not known at this time
- Keep in mind...
 - You no longer need internet from DirecTV, Dish, HughesNet, or Verizon (\$60 to \$120/mo)
 - You may eliminate need for DirecTV or Dish television (\$60 to \$200/mo) by moving to streaming services (\$6 to \$75/mo)

Note: All pricing is subject to change at the discretion of the ISP

WHY NOT SATELLITE BROADBAND, LIKE HUGHESNET OR STARLINK?

- Satellite-based broadband is a solution for an individual or a business, not for the entire Township
- Current satellite services are limited by bandwidth, latency, throttling, and data caps
- Starlink has promise, but is not yet a commercial offering
- All satellite services can be affected by obstructions (trees) or bad weather

WHY CAN'T I JUST USE MY PHONE FOR BROADBAND?

- Cell phone broadband is a solution for an individual, not the entire Township
- Cell phone coverage in the Township varies from no service to adequate service in certain locations
- Cell phone broadband is limited by bandwidth, throttling, and data caps

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Q&A

PLEASE USE THE MICROPHONE SO EVERYONE CAN HEAR
YOU